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ABSTRACT

Instructional materials are usually selected by classroom teachers. Little is known about what criteria they use in making these choices. Most of the literature recommends, instead, the attributes to be used. This study employs a qualitative approach to examine one teacher's thinking about her selection of materials. Fundamental to her thinking was a preference for materials that interest, and reflect the needs of, the students. Sixteen references are included. (Author/JD)

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Teacher Thinking and Instructional Materials: Some Relationships Between a Case Study and a Literature Review

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The Importance of Materials

The selection of instructional materials is an important aspect of teachers' decision making processes.As plans are made at the first of the school year, materials are considered first (Yinger , 1978) .The overwhelming majority of contacts made by students with the curriculum during the school day are with instructional materials-usually texts (Davis et al, 1977) .It has been asserted that texts form the curriculum (Anderson and Tomkins, 1981).

If materials are this important in the planning and implementation of the curriculum, it would be useful to know who selects them and by what processes.In many jurisdictions, at least half of the materials are chosen by the classroom teacher (Komoski, 1978).

Teachers Thoughts: Their Importance, and How They Might be Discovered

We know little about how teachers decide which materials to use.Instead, most of the literature deals with selection criteria recommended by curriculum specialists (eg. Erhaut et al, 1974 ;Mahung, 1980).

Part of the absence of data regarding this kind of teacher decision making may be due to the doubt by some as to whether decision makers' thoughts can be effectively got at (Nisbett and Wilson, 1977).They doubt the accuracy of self-reports since the reporter may be either self-serving or unconscious of true motivations.There seems

to be evidence however, that subjects can accurately report their thoughts, especially if the reports are at the time of or shortly after the thoughts (Ericsson and Herbert, 1980).

The use of lab situations in which the decision maker makes selections while being audio or video taped has been successfully used in the study of decision making, sometimes with the use of transcripts of the "thinking out loud" which took place (Toomey, 1977;Peterson, Marx and Clark, 1978;Clark and Yinger, 1979;Yinger and Clark, 1982).

The printed copy of what was said is used to stimulate the recall of the subject in a subsequent interview (Haig, 1981) .In this follow up session the teacher is able to state what else was going on in his mind and explain the rationale for particular decisions.

This non-numerical approach to research is sometimes supplemented by open-ended interviews, direct observation of a teacher over a period of time, and the use of written records such as journals and schedules kept by th teacher (Yinger, 1978; Clark and Elmore, 1979).

A quite promising technique which has been used to observe teacher planning in a controlled situation involves the teacher comparing materials according to teacher-described attributes and attaching numerical significance to each characteristic (Ben-Peretz and Katz, 1982).

Research Linking Thoughts and Materials: Our Approach

Few of the studies which used any of these techniques dealt with materials.Those that did usually treated them as one of many aspects to consider.Not many approaches used more than one research

technique.

I decided for these reasons to attempt an investigation in which instructional materials was the major consideration and in which a number of techniques were used.

One grade four teacher was worked with for a number of months during which she was audio and video taped while she made materials selections or explained previously made materials decisions.This was also a participant observation experience for her, since she was encouraged to comment on the investigator's notes as they accumulated.These corrections or clarifications of what she had said regarding one interview became the core of the next interview.This teacher was also observed as she described significant attributes of materials she did and did not like.She then attached to each item a numerical value to show relative importance.

Previous investigators found that teachers chose materials partly based on what their orientaion to the curriculum was (Anderson and Tomkins, 1981;Zaltman, 1977).If they were objectives oriented, they wanted their materials to reflect the course of study (Toomey, 1977).If they were more oriented towards the student than the curriculum, they were most interested in whether the material was motivating to the student and matched his ability level and experiential background.

If we were to use this dichotamy, our teacher would be described as student oriented. In her case, this seems to be an incomplete description, since it will be noted that she has attributes of both kinds of teacher.

Her Criteria

My grade four teacher seemed to be most concerned that the materials reflected her students' needs and interests.Since she was largely using a theme approach, she would first select a topic-usually a season or holiday, and then look for materials which would fit the ability and interest level of her students.

Most often she mentions bright colours, a large number of pictures, a short continuous story, dramatizability, and a happy ending.She finds that children put materials back when they don't have pictures, are too hard , or they don't understand them.Children, she says, do not want serious books.They want light, happy endings.

The Necessity of Texts.

Texts are also important as a way of keeping the lessons tied into the objectives of the curriculum.She accepted this assumption which had been stated by both the local curriculum committee and a junior high teacher who would eventually receive these students.There had been a problem that "the Junior High teachers felt that the kids were coming in not really prepared with the things that they were hoping they were, should have."The Junior High teacher now feels that "...the children perhaps have covered a set thing."

Fitting the Text to the Student and the Student to the Program

The grade four teacher varies this textbook use by digging up her

own exercises"...whenever they're having difficulties like capital letters on streets and abbreviations.Then you dig up more materials.But this certainly gives you the headline and then you fill in the remaining difficulty...."

At first there seemed to be a conflict between teacher as follower of a preprogrammed curriculum and teacher as responder to perceived student needs.She seems however to be using the textbook as a table of contents of her curriculum.She adapts this syllabus by introducing additional instructional materials.

Reading appears to be the area where she feels the most reluctance to deviate from the externally structured curriculum.Although part of the time she uses a nontext approach in teaching reading, most often she uses a core text because"...I feel that it keeps me on the track for the basic skills that are required for certain levels."She fears that if she did not part of the time use a core text approach in reading, "...you might branch, go too far, which for some children could become frustrating."During another conversation, she again said that textbooks are used to "...keep you on track for a given age, age group, or school group."She repeated that the text is never her "whole thing."If a student cannot cope with a text, she finds him something else, "another text or whatever."

The workbooks that go with the readers are both optional and mandatory.When a new text is used, the children are told that they can finish whatever pages they wish except those that directly relate to the story.In those cases, the children found that they could not do the questions until they had the vocabulary, and a little bit of background and discussion. Sometimes the children will say to her,

"Oh, now I see what they mean by that page in the workbook."

This teacher feels that the parents also see the text and accompanying workbooks as guarantees that the appropriate curriculum is being covered.The children work ahead on their extra practice pages if they have been sick, because parents "...seem to be concerned, 'oh they're going to miss out on their work'...if I had a workbook or an activity sheet that I can send home, Mother is satisfied, and that's important too."

At the time of these interviews there was no recommended social studies text for grade four.She therefor used the Department of Education Guide and "my head".For this subject she allows the children to choose whether they work from their own community to the rest of the world, or the other way around.Several different social studies texts are used- for digging up ideas.

If a text has been recommended for use by the Department of Education after she begun her own program, she does not necessarily adopt the text.There is a new text in health which"I don't use wholeheartedly."There already was a "really well thought-out developmental program from primary to six," developed by a local health committee.She uses the text when she feels it is necessary.It appears that a text will be used to the extent that it either contains or reflects a sequential program.

In some cases, Glenda seems to be using commercially prepared materials as the core of her instruction without realizing it.While she said that she did not use a speller, the words learned did come from a spelling text.It may be that she meant that she did not use a spelling activity book.While there was no handwriting text, children

were given assignment sheets from a manuscript writing book.As a further structure for their writing program, Ginn Company had provided cards containing the letters of the alphabet, which were placed over the chalk board.

A problem which she found with using one text or even program sequentially is that topics go on all year.In the case of health for example, safety appears in the form of labels on cans, bus safety, etc., throughout the year.

A Non-text Approach:

Even in the area of reading, she does at times deviate from the prescribed program.Several times during the year, she departs from the core reader to use a "whole language approach."She describes this method as "taking a theme and building everything on it...using few skills worksheets."

A theme I observed her work through was Hallowe'en.She found in a book about Hallowe'en a simplified story which she photocopied.The children worked in pairs, to save money.They began by "tearing it apart," meaning "...we'll read it, talk it and discuss it, pick out the Hallowe'en words and pick out the descriptive words."While the story from a theme book had become a text, it was one in which the teacher created her own manual in that she decided what she would do with this material.The children also did things with this teacher-created text that they would not have been able to do with a commercial text.They were allowed to underline their words, make foot or sidenotes, and put on synonyms.

When she goes beyond a text she sees herself as a "scrounger".She

told me she has a closet full of materials that she has gathered over the years.There are five or six different books that she uses in different ways for Hallowe'en.

Attributes of Non-text Materials

I asked her to compare these Hallowe'en books on a conceptual repertory grid, which entailed saying in what ways the books compared were similar or different, so that aspects of books important to her would emerge.Once particular constructs had been isolated, they were grouped according to their similarities.One cluster of similarities was more colour in the pictures, a folk tale, easier to read, considered by the teacher to be attractive to the student, interesting to young children, not a serious literary form, and easily dramatized.

I asked her to explain the connections among these constructs.She said that not serious and easier were nearly synonyms; being easily dramatized would go with interest to children because "...they feel they can get themselves into it and zit it up or zat it out whichever."

I mentioned to her that two books were judged by her to be especially similar.She found them to be easier, eye catching, appealing to children, and short.She used the term "flippability" which she also interpreted as rectangular.Their content was similar because they had seen both on TV,"...the pictures were big, bright, colourful.And yet you could flip through it and kind of, almost make your own story from the picture."

A comparison of the two most different books revealed that while one had a continuous story, the other had three distinct parts.She could not explain why this difference would be significant.

In the case of the other very different pair, their difference was mainly accounted for by the presence or absence of pictures.The one that lacked pictures did not provide visual cues."...you had to pick it up and read it without having as many pictures to predict what's going to happen."She was concerned that the students not have to derive meaning exclusively from words.She is also working at a higher level of student thinking, since she is encouraging them to make predictions.

What had the most influence on other constructs was whether the teacher liked the material, whether it was attractive to the students, and whether it could be read and understood quickly.The least influential constructs were thickness of book, width greater than height, and usability.What made it attractive to the students was largely whether it had pictures, and dramatizability,and whether it had previously been a television program.

Although, or perhaps because she was embarassed to find the construct that the teacher liked the material to be important, she spent quite a while explaining it."We do the things that we think we really like and feel the most comfortable with;we perhaps do a better job...If you are enthused, and you like it, and it seems to like you, and you seem to build up resources for it, it seems to give it more punch than some other things."

It does appear that what she prefers is what she thinks her students would enjoy.That she is correct in judging what they prefer

is something we must accept based on her years of observation.Certainly she will have some insights regarding student selections that the children may not have.

Her main concern is that the students enjoy the material.When the books are compared both on a similar and not similar basis, and also on a numerical scale indicating degree of similarity, attractiveness to the student is shown to be the most important.What she meant by attractive and unattractive books was whether a child on his own might pick up the material- because it was easier to read, had more colour, etc.She finds that children put materials back when they don't have pictures, are too hard or they don't understand them.Children, she says, do not want serious books.They want light, happy endings.

She suggested that we add a construct for valuable to the teacher and valuable to the student.At the same time she pointed out that what might be perceived as valuable by the student might in fact be superficial.It is not clear what should be done with this request.These did not emerge from the comparison exercises, which hopefully reveal sometimes unverbalized priorities.Were these two constructs that Glenda's altruism demanded she list whether she used them in practice or not?It seems that frequently what makes a material valuable to the teacher and student is that it is attractive to both.

While we are told that the teacher likes the material is important, we are not informed what makes it attractive to her.Almost all the categories she provided were connected with being of interest to the student.If the question of what makes a material attractive to the teacher becomes an intermediary question to what makes it attractive to the student, our answer in this teacher's case would be

that the material would need to have considerable colour in the big bright pictures, be a folk tale, or previously seen on television or in a filmstrip, be not a serious literary form, and be easily flip-throughable.The material needed to be short, easily understood, and have a happy ending.

Materials as a Source of Instructional Ideas

When asked directly, she said that she got her ideas from Scholastic books (a publishing company), teachers' magazines, teacher talk in the staffroom, at conferences, and from student teachers.When asked why she did not mention the manual that was sitting beside her on her desk, she replied that its use was assumed- as was the use of curriculum guidelines which were locally developed.This would likely refer to the language guidelines which had been developed by a team of teachers from within the board.

In the case of social studies though, since there is no government approved textbook, she uses the Provincial guideline and "my head".She also examines individual copies of texts written for her grade level for ideas.She said that if a social studies text had been prescribed, she would have used her own judgment on how it would be used.She would in any case have diversified using her own materials.

Aside from conversations with other teachers, most of her instructional ideas come from texts, manuals, and government guidelines.It could be argued that instructional materials are as important as a source of teaching methods as they are a tool for the student.To an extent though materials are tools of the teacher, since

she searches out materials that further her aims.

One problem that she has with texts is that while books and the programs they support are sequential, many of the topics dealt with reoccur throughout the year.Safety, for example, appears in the fall with bus safety, but also is dealt with when signs on cans are discussed.

A Return to the Teacher as Scrounger

"You know I think teachers are always scroungers to find whatever they can."She will use "anything that is related" to her topic.For grammar she will use old texts and any book that she has bought that has grammar exercises.When she begins her planning for any topic, she will "just go to the corner cupboard there and dig through and see what she can find."It was that cupboard that contained the Hallowe'en books that were compared.It is likely that the materials in the cupboard are selected in the same way, and with the same criteria as the textbooks.

Her planning involves determining activities by what materials are available.These materials, excepting prescribed texts, are chosen by her, to supplement or expand upon the text or prescribed guidelines.In the majority of cases, materials do determine how she will teach.To the extent that she selects some of these materials, this teacher is retaining some control over her curriculum.While it was not touched on in this study, how she uses the materials would also be an individual decision.Teachers' manuals are used, since one

was noticed one her desk during an interview.When asked why she had not mentioned its use, she said that she thought its use was assumed.

In Summary:

The literature on this topic is peripheral.Few studies ask how a teacher selects instructional materials.In the studies where this question is asked, the techniques for asking range from surveys through unobtrusive measures as with schedules and journals, to direct observation of choices being made in a laboratory setting.Usually teachers are reported to make their selections based on understandability and enjoyment for the student.

While this was one of the few cases where several methods were simultaneously used, the results reflect those of reports earlier mentioned.This teacher prefers materials that interest, and reflect the needs of her student.While she decides what the needs of the student might be, she does attempt to have the student indicate what he enjoys or finds interesting.Much of our activity involved attempting to compare materials according to how they might interest her students.It would be a fair assumption that she has accurately reflected their tastes since she has had many years of experience at this grade level, and appears to maintain the interest of her students.

This teacher is however, a mediator of her children's interests and needs.While we can not be sure she accuratelty represents them, our culture does assume that teachers can make these judgments accurately.

There is considerable argument about whether when the

interviewee reports his thoughts, he is stating what actually has transpired. There does seem to be a match in this study between what she chose while observed, and what she said her normal decision processes were.

There have been questions raised here that do not normally get asked. Curriculum developers, publishers and teachers' organizations should be interested in how teachers select instructional materials. If some generalizations could be made in this area, both curriculum specialists and publishers might be more successful in designing materials which would please the practitioner. Teachers' organizations should be concerned that the producers of instructional materials in both the research and commercial fields tend to tell teachers how materials should be selected, rather than asking (perhaps humbly), how teachers make these decisions. It seems likely that a material now obtained by a teacher will be subverted in its purpose in any event if that purpose does not match the teacher's.

A number of methods exist that enable us to get at what a teacher is thinking. Several of these techniques have been both reported on and used in this study. That fact that when used in conjunction they complement each other suggests that they provide reliable information. That the results replicate as well as add to the existing literature further argues that they are authentic.

Both what the teacher thinks, and what she decides about instructional materials are worthy of much investigation.

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